Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Monsanto Company - Muscatine
Facility Location: 2500 Wiggens Road, Muscatine, IA 52761
Air Quality Operating Permit Number: 04-TV-006
Expiration Date: March 1, 2009

EIQ Number: 92-6908
Facility File Number: 70-01-008

Responsible Official
Name: Oscar C. Berryman
Title: Plant Manager
Mailing Address: P.O. Box 473, Muscatine, IA 52761
Phone #: (563) 262-7200

Permit Contact Person for the Facility
Name: Susie Hidalgo
Title: ES&H Area Leader
Mailing Address: P.O. Box 473, Muscatine, IA 52761
Phone #: (563) 262-5673

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section Date

Table of Contents

Abbreviations

acfm ..... actual cubic feet per minute
CFR ..... Code of Federal Regulation
^{o}F ..... degrees Fahrenheit
EIQ ..... emissions inventory questionnaire
gr./dscf ..... grains per dry standard cubic foot
gr./100 cf ..... grains per one hundred cubic feet
IAC ..... Iowa Administrative Code
IDNR ..... Iowa Department of Natural Resources
MCB ..... monochlorobenzene - vapor pressure at 20^{o}C/72^{o}F = 1.18 kPa
MSDS ..... Material Safety Data Sheet
MVAC ..... motor vehicle air conditioner
NSPS ..... new source performance standard
ppmv ..... parts per million by volume
psia ..... pounds per square inch area
lb./hr ..... pounds per hour
lb./MMBtu ..... pounds per million British thermal units
scfm ..... standard cubic feet per minute
SIC ..... Standard Industrial Classification
TPY ..... Tons per year
USEPA ..... United States Environmental Protection Agency

Pollutants

PM ..... particulate matter
PM_{10} ..... particulate matter ten microns or less in diameter
SO_2 ..... sulfur dioxide
NO_x ..... nitrogen oxides
VOC ..... volatile organic compound
CO ..... carbon monoxide
HAP ..... hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Monsanto Company - Monsanto
Permit Number:

Facility Description: Pesticide Manufacturing (SIC 2879)

Equipment List
Liquid Formulations

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
253	EU-10-5039-401	#1 Raw Material Storage Tank
254	EU-10-5039-412	#2 Raw Material Storage Tank
254-B		
255	EU-10-5039-421	#3 Raw Material Storage Tank
256	EU-10-5039-429	#4 Raw Material Storage Tank
336	EU-10-0741	#6 Raw Material Storage Tank
309	EU-10-0594	#1 Amine Salt Storage Tank
335	EU-10-0727	#2 Amine Salt Storage Tank
356	EU-10-0812	#3 Amine Salt Storage Tank
357	EU-10-0815	#4 Amine Salt Storage Tank
366	EU-10-0945	#5 K Salt Storage Tank
367	EU-10-0951	#6 K Salt Storage Tank
41	EU-8TK-1	#1 Solvent Storage Tank
40	EU-8-2836-339	#2 Solvent Storage Tank
43	EU-8-2836-337	#3 Solvent Storage Tank
23	EU-10-2014-105	#1 Emulsifier Tank
25	EU-10-2014-207	#2 Emulsifier Tank
46	EU-10TK-5	#3 Emulsifier Tank
259	EU-10TK-23	#4 Emulsifier Tank
247	EU-10TK-22	#5 Emulsifier Tank
257	EU-10-5039-437	#6 Emulsifier Tank
322	EU-10-0614	#7 Emulsifier Tank
323	EU-10-0617	#8 Emulsifier Tank
344	EU-10-0753	#9 Emulsifier Tank
345	EU-10-0758	#10 Emulsifier Tank
34	EU-10TK-3	Herbicide Additive Tank
24	EU-10-2014-113	#1 Blend Tank
26	EU-10-2014-210	#2 Blend Tank
42	EU-10TK-26	#3 Blend Tank
289	EU-10-581	#5 Blend Tank

Equipment List
Liquid Formulations (cont.)

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
139	EU-10D-1	#4 Blend Tank
362		
260	EU-10TK-24	Small Blend Tank
258	EU-10-5039-453	#1 Product Storage Tank
248	EU-10-5039-461	#2 Product Storage Tank
249	EU-10-5025-466	#3 Product Storage Tank
250	EU-10-5025-471	#4 Product Storage Tank
251	EU-10-5025-445	#5 Product Storage Tank
290	EU-10-584	#6 Product Storage Tank
332	EU-10-662	#7 Product Storage Tank
333	EU-10-710	#8 Product Storage Tank
334	EU-10-711	#9 Product Storage Tank
369	EU-10-180	#10 Product Storage Tank
202	EU-10-3773-410	High Speed Jugging
137	EU-10FN-22	Spent Product Filter Drying (Jugging)
172	EU-10FN-2	#1 Drum Filling
173	EU-10FN-3-1	Spent Product Filter Drying (Drumming)
	EU-10FN-3-2	Product Shuttle Filling
144	EU-8BL-1	#1 South Bulk Loading
145	EU-8BL-2	#2 South Bulk Loading
207	EU-10BL-1	Bulk Rail Loading
208	EU-10BL-2	Bulk Truck Loading
329	EU-10BL-3	Bulk Truck Loading
359	EU-10-0897	Glyphosate Salt Rail Loading
370	EU-10BL-4	Bulk Product Rail Loading
241	EU-10TK-21	Wastewater Tank
27	EU-10FUG-3	Liquid Formulations Blending Fugitives
28	EU-10FUG-1	Liquid Formulations Packaging Fugitives

Insignificant Equipment List
Liquid Formulations

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-10TK-27	Glycol Thawing Storage Tank (1300 gallons)
EU-8TK-3	Bulk Waste Storage Tank (2032 gallons)
EU-3773-420	High Speed Jug Line Sump Tank (400 gallons)
EU-10-0603	#2 Drum Filling
EU-10-0935	Formulations Test Storage Tank
EU-10-0936	Formulations Test Storage Tank
EU-10-0937	Formulations Test Storage Tank
EU-10-0938	Formulations Test Storage Tank
EU-10-0939	Formulations Test Storage Tank
EU-10-551	Safener Premix Tank

Equipment List
Flowable Formulations

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
181	EU-14TK-350	Raw Material Storage Tank
182	EU-14TK-33	Raw Material Storage Tank
299	EU-14TK-38	Raw Material Storage Tank
346		
310	EU-14TK-356	PAPI Storage Tank
347	EU-14-464	Isocyanate Storage Tank
361	EU-14-0828	Herbicide Additive Storage Tank
303	EU-14TK-26	Herbicide Additive/Poduct Storage Tank
311	EU-14TK-300	PAPI Feed Tank
326	EU-14TK-306	Isocyanate Feed Tank
272	EU-14TK-31	Residence Time Tank
301	EU-14TK-31	Residence Time Tank
	EU-14TK-280	Product Surge Tank
187	EU-14TK-101	Product Storage Tank
188	EU-14TK-102	Product Storage Tank
211	EU-14TK-390	Product Storage Tank
212	EU-14TK-391	Product Storage Tank
300	EU-14TK-101	Product Storage Tank
	EU-14TK-102	Product Storage Tank
	EU-14TK-390	Product Storage Tank
	EU-14TK-391	Product Storage Tank
216	EU-14TK-32	Premix Tank
	EU-14TK-36	Formulation Tank
	EU-14TK-751	Formulation Tank
	EU-14-186	East Supersack Unloading
	EU-14-187	West Supersack Unloading
	EU-14-763	North Supersack Unloading
	EU-14RV	Baler & 3 Rotary Valves
339	EU-14TK-13	West Stabilizer Tank
	EU-14TK-21	East Stabilizer Tank
174	EU-14D-1	Flaked Pesticide Handling
186	EU-14BL-1	East Bulk Herbicide Loading
171	EU-14BL-2	West Bulk Herbicide Loading

Equipment List
Flowable Formulations (cont.)

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
363	EU-14BL-3	Bulk Truck Unloading/Loading
368	EU-14-875	Rail Unloading/Product Rail Loading
389	EU-14-0899	Bulk Rail Loading
159	EU-14-FUG-1	Flowables Fugitives

Insignificant Equipment List
Flowable Formulations

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-14-0198-1	Slurry Tank
EU-14-0198-2	Dicamba Hood
EU-14TK-32[1]	Premix Tank
EU-14TK-216	Densification Tank 216
EU-14TK-221	Densification Tank 221
EU-14TK-227	Densification Tank 227
EU-14TK-202	HMD Storage Tank
EU-14TK-316	Release Tank 316
EU-14TK-318	Release Tank 318
EU-14TK-322	Release Tank 322
EU-14TK-308	HMD Feed Tank
EU-14TK-20	Glycol Tank
EU-14TK-8	Glycol Tank
EU-14TK-200	Raw Material Storage Tank
EU-14TK-229	#1 Waste Feed Tank
EU-14TK-231	#2 Waste Feed Tank
EU-14TK-241	Chiller Surge Tank
EU-14TK-28	Additive Mix Tank
EU-14TK-274	Additive Feed Tank
EU-14TK-280	Product Surge Tank
EU-14TK-255	Divert Tank

[1] This unit is also included under EP 216 in the "Emission Point Specific Conditions". The emissions from this unit are considered as an "insignificant activity" when vented through EP 321.

Insignificant Equipment List
Flowable Formulations (cont.)

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-14TK-36[2]	Formulation Tank A
EU-14TK-751[2]	Formulation Tank B
EU-14TK-2	Flaker Feed Tank
EU-14TK-27	Process Sump Tank
EU-14-0404	Glycol Tank

[2] These are also included under EP 216 in the "Emission Point Specific Conditions". The emissions from this unit are considered as "insignificant activities" when vented through EP 302.

II. Plant-Wide Conditions

Facility Name: Monsanto Company - Muscatine
Permit Number: 04-TV-006

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: Five (5) years
Commencing on: March 2, 2004
Ending on: March 1, 2009

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Multiple Title V Permits

Monsanto Company has applied for three Title V permits for their Muscatine facility. The facility will be considered as a whole with regard to applicability of various air permitting programs. This permit covers two process areas at the facility: the Liquid Formulations facility and the Flowable Formulations facility.

- The Flowable Formulations are typically water-based liquid herbicide formulations consisting of herbicide technical ingredients and other herbicide additives. Both microencapsulated and non-microencapsulated formulations are produced.

- The Liquid Formulations area formulates, packages, and ships herbicides as emulsifiable concentrates, herbicide technical active ingredients, and formulated herbicide premixes. The Liquid Formulations Facility packages and ships products in jugs, drums, shuttles, and mini-bulk containers. There are also facilities for providing bulk shipment of products in rail cars or tank trucks.

<u>Other Title V Permits</u>

IDNR intends to issue one permit to cover the CAC unit, ETFAA unit, GT unit, and the Multipurpose unit at this facility.

- The CAC Unit produces the herbicide intermediate chloroacetyl chloride (CAC). CAC is used at the facility to produce alachlor, acetochlor, butachlor, and propachlor.

- The ETFAA Unit produces ethyl 4,4,4-trifluoroacetoacetate (ETFAA), an intermediate used in the production of the pyridine family of herbicides. The facility was sold to Rohm and Haas in 1994 and then to Dow Agrosciences in 2000. Monsanto operates the ETFAA facility for Dow.

- The Glyphosate Technical (GT) Unit produces two salts of glyphosate: amine salt and potassium salt. These salt solutions are considered herbicide active ingredients.

- The Multipurpose Unit produces two products on a campaign basis. Part of the year, the unit may produce propachlor, a herbicide active ingredient, and n-isopropylaniline (NIPA), an intermediate used in the propachlor process. Other times during the year, the unit may produce MON 13900 (furilazole), a seed safener that is blended with acetochlor for use by Monsanto's formulation facilities. The products cannot be made simultaneously. This unit may also be used to produce the herbicide metolachlor using a process similar to that used for propochlor production.

IDNR intends to issue a third permit to cover the A-Unit, and the Unit Services.

- The A-Unit produces acetochlor, alachlor, and butachlor from CAC.

- The Unit Services area includes utilities and waste treatment activities at the facility.

Emission Limits
Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)[1]:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

[1] Pending approval into Iowa's State Implementation Plan (SIP), paragraph 567 IAC 23.3(2)"a" (as revised 7/21/1999) is considered *state enforceable only*.

Particulate Matter[2]:
The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.
Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Rated Capacity
The rated capacities listed within this permit are included for descriptive purposes only. These rated capacities are not considered to be enforceable permit limits placed upon the emission units.

[2] Paragraph 567 IAC 23.3(2)"a" (prior to 7/21/1999) is the general particulate matter emission standard currently in the Iowa SIP.

Compliance Plan
The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Monsanto Company - Muscatine is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Monsanto Company - Muscatine shall comply with such requirements in a timely manner.
Authority for Requirement: 567 IAC 22.108(15)

Section 112(j) of the Clean Air Act (MACT Hammer)

On May 16, 2002, Monsanto Company - Muscatine submitted a Part 1 MACT application to IDNR, indicating that the facility may be subject to the MACT standard for Industrial/Commercial/Institutional Boilers & Process Heaters, 40 CFR 63 Subpart DDDDD, when it's promulgated. Monsanto Company - Muscatine must submit a Part 2 MACT application to IDNR by the deadline specified in 40 CFR 63.52(e), if 40 CFR 63 Subpart DDDDD has not been promulgated by that date.

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

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40 CFR 63 Subpart FFFF Requirements

Parts of this facility will be subject to the Miscellaneous Organic Chemical Manufacturing and Miscellaneous Coating Manufacturing (MON) MACT. This MACT was published in the Federal Register on November 10, 2003. All existing emission units subject to this MACT must demonstrate compliance with all applicable requirements no later than November 10, 2006. Any new affected sources constructed after November 10, 2003 must be able to demonstrate compliance with all applicable requirements upon startup of that equipment.

Initial Notifications 40 CFR 63.2515:
- If an affected source is started up before November 10, 2003, an initial notification must be submitted within 120 calendar days after November 10, 2003.
- If an affected source is started up after November 10, 2003, and initial notification must be submitted within 120 calendar days after the source become subject to this subpart.

Precompliance Report 40 CFR 63.2520(c):
- A Precompliance Report may be required to request approval for items 63.2520(c)(1) – (7). If a Precompliance Report is required, it must be submitted six (6) months prior to the compliance date for existing affected sources, or for new sources, upon application for approval of construction or reconstruction.

Authority for Requirement: 40 CFR Part 63 Subpart FFF

III. Emission Point-Specific Conditions

Facility Name: Monsanto Company - Muscatine
Permit Number: **04-TV-006**

Liquid Formulations

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
253	EU-10-5039-401	#1 Raw Material Storage Tank
254	EU-10-5039-412	#2 Raw Material Storage Tank
254-B		
255	EU-10-5039-421	#3 Raw Material Storage Tank
256	EU-10-5039-429	#4 Raw Material Storage Tank
336	EU-10-0741	#6 Raw Material Storage Tank
309	EU-10-0594	#1 Amine Salt Storage Tank
335	EU-10-0727	#2 Amine Salt Storage Tank
356	EU-10-0812	#3 Amine Salt Storage Tank
357	EU-10-0815	#4 Amine Salt Storage Tank
366	EU-10-0945	#5 K Salt Storage Tank
367	EU-10-0951	#6 K Salt Storage Tank
41	EU-8TK-1	#1 Solvent Storage Tank
40	EU-8-2836-339	#2 Solvent Storage Tank
43	EU-8-2836-337	#3 Solvent Storage Tank
23	EU-10-2014-105	#1 Emulsifier Tank
25	EU-10-2014-207	#2 Emulsifier Tank
46	EU-10TK-5	#3 Emulsifier Tank
259	EU-10TK-23	#4 Emulsifier Tank
247	EU-10TK-22	#5 Emulsifier Tank
257	EU-10-5039-437	#6 Emulsifier Tank
322	EU-10-0614	#7 Emulsifier Tank
323	EU-10-0617	#8 Emulsifier Tank
344	EU-10-0753	#9 Emulsifier Tank
345	EU-10-0758	#10 Emulsifier Tank
34	EU-10TK-3	Herbicide Additive Tank
24	EU-10-2014-113	#1 Blend Tank
26	EU-10-2014-210	#2 Blend Tank
42	EU-10TK-26	#3 Blend Tank
289	EU-10-581	#5 Blend Tank

Liquid Formulations (cont.)

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
139	EU-10D-1	#4 Blend Tank
362		
260	EU-10TK-24	Small Blend Tank
258	EU-10-5039-453	#1 Product Storage Tank
248	EU-10-5039-461	#2 Product Storage Tank
249	EU-10-5025-466	#3 Product Storage Tank
250	EU-10-5025-471	#4 Product Storage Tank
251	EU-10-5025-445	#5 Product Storage Tank
290	EU-10-584	#6 Product Storage Tank
332	EU-10-662	#7 Product Storage Tank
333	EU-10-710	#8 Product Storage Tank
334	EU-10-711	#9 Product Storage Tank
369	EU-10-180	#10 Product Storage Tank
202	EU-10-3773-410	High Speed Jugging
137	EU-10FN-22	Spent Product Filter Drying (Jugging)
172	EU-10FN-2	#1 Drum Filling
173	EU-10FN-3-1	Spent Product Filter Drying (Drumming)
	EU-10FN-3-2	Product Shuttle Filling
144	EU-8BL-1	#1 South Bulk Loading
145	EU-8BL-2	#2 South Bulk Loading
207	EU-10BL-1	Bulk Rail Loading
208	EU-10BL-2	Bulk Truck Loading
329	EU-10BL-3	Bulk Truck Loading
359	EU-10-0897	Glyphosate Salt Rail Loading
370	EU-10BL-4	Bulk Product Rail Loading
241	EU-10TK-21	Wastewater Tank
27	EU-10FUG-3	Liquid Formulations Blending Fugitives
28	EU-10FUG-1	Liquid Formulations Packaging Fugitives

Emission Point ID Numbers: 253, 254, 254-B, 255, 256

Associated Equipment

Associated Emission Unit ID Numbers: EU-10-5039-401, EU-10-5039-412, EU-10-5039-421, EU-10-5039-429

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Control Equipment	Raw Material	Tank Capacity (gallons)	Construction Permit
253	EU-10-5039-401	#1 Raw Material Storage Tank	NA	Herbicide Additive	30,000	99-A-884
254	EU-10-5039-412	#2 Raw Material Storage Tank	NA	Herbicide Technical	30,000	99-A-885
254-B			CE-10CS-2: Carbon Filtration System			
255	EU-10-5039-421	#3 Raw Material Storage Tank	NA	Herbicide Technical	30,000	99-A-886
256	EU-10-5039-429	#4 Raw Material Storage Tank	NA	Herbicide Technical	30,000	99-A-887

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission points at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A record of all materials stored in each vessel shall be maintained. An MSDS shall be kept for all materials stored.
2. The amount of material put through each vessel over the previous month shall be recorded at the end of each month. The total amount of material put through each vessel over the previous twelve months shall also be recorded at the end of each month.
3. An estimate of the amount of VOC's emitted from each vessel over the previous month shall be recorded at the end of each month. The total amount of VOC's emitted from each vessel over the previous twelve month shall also be recorded at the end of each month.

Authority for Requirement: Iowa DNR Construction Permits 99-A-884 – 99-A-887

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

Stack Height (feet): 43
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 6.4
Stack Temperature (^{o}F): 86
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permits 99-A-884 – 99-A-887

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 336

Associated Equipment

Associated Emission Unit ID Number: EU-10-0741

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10-0741
Emission Unit Description: #6 Raw Material Storage Tank
Raw Material/Fuel: Herbicide Technical
Tank Capacity: 26,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: Iowa DNR Construction Permit 99-A-182
567 IAC 23.3(2)"d"

[(1)] If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. The material stored in the tank must have a true vapor pressure less than 15 kPa or 2.176 psia.

Authority for Requirement: Iowa DNR Construction Permit 99-A-182

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The vapor pressure of all materials stored in the tank.

Authority for Requirement: Iowa DNR Construction Permit 99-A-182

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 48
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (acfm): 7.4
Stack Temperature (^{o}F): 122
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 99-A-182

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 309, 335, 356, 357

Associated Equipment

Associated Emission Unit ID Numbers: EU-10-0594, EU-10-0727, EU-10-0812, EU-10-0815

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)	Construction Permit
309	EU-10-0594	#1 Amine Salt Storage Tank	Herbicide Technical	250,000	97-A-186S4
335	EU-10-0727	#2 Amine Salt Storage Tank	Herbicide Technical	250,000	98-A-940S3
356	EU-10-0812	#3 Amine Salt Storage Tank	Herbicide Technical	250,000	99-A-1077S2
357	EU-10-0815	#4 Amine Salt Storage Tank	Herbicide Technical	250,000	99-A-1078S2

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC's)
Emission Limit(s): 13.2 ton/yr.[(1)]
Authority for Requirement: Iowa DNR Construction Permits 97-A-186S4, 98-A-940S3, 99-A-1077S1, 99-A-1078S1

[(1)] Total for the all emission points associated with Construction Permits 97-A-182S7, 97-A-183S7, 97-A-184S4, 97-A-185S4, 97-A-186S4, 97-A-188S4, 97-A-189S5, 98-A-940S3, 99-A-305S3, 99-A-1077S2, 99-A-1078S2.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Each tank shall only store volatile organic liquids with a maximum true vapor pressure less than 3.5 kPa.
2. Each tank shall store material that contains no organic HAPs or contains organic HAP as impurities only.

Authority for Requirement: Iowa DNR Construction Permits 97-A-186S4, 98-A-940S3, 99-A-1077S2, 99-A-1078S2

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner or operator shall keep records showing the maximum true vapor pressure of the material stored in each vessel.
2. The owner or operator shall keep records demonstrating that any organic HAPs found in each storage vessel are as impurities only.

Authority for Requirement: Iowa DNR Construction Permits 97-A-186S4, 98-A-940S3, 99-A-1077S2, 99-A-1078S2

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (acfm): NA – Natural Draft
Stack Temperature (^{o}F): 120
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permits 97-A-186S4, 98-A-940S3, 99-A-1077S2, 99-A-1078S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 366, 367

Associated Equipment

Associated Emission Unit ID Numbers: EU-10-0945, EU-10-0951

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)	Construction Permit
366	EU-10-0945	#5 K Salt Storage Tank	Herbicide Technical	250,000	01-A-1352S1
367	EU-10-0951	#6 K Salt Storage Tank	Herbicide Technical	250,000	01-A-1353S1

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these units at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Each tank shall only store volatile organic liquids with a maximum true vapor pressure less than 3.5 kPa.
2. Each tank shall store material that contains no organic HAPs or contains organic HAP as impurities only.

Authority for Requirement: Iowa DNR Construction Permits 01-A-1352S1, 01-A-1353S1

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner or operator shall keep records showing the maximum true vapor pressure of each material stored in the vessel.
2. The owner or operator shall keep records demonstrating that the only organic HAPs found in each storage vessel are as impurities only.

Authority for Requirement: Iowa DNR Construction Permits 01-A-1352S1, 01-A-1353S1

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

Stack Height (feet): 47' 4"
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (scfm): Natural Draft
Stack Temperature (^{o}F): 104
Horizontal Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permits 01-A-1352S1, 01-A-1353S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 41

Associated Equipment

Associated Emission Unit ID Number: EU-8TK-1

Applicable Requirements

Emission Unit vented through this Emission Point: EU-8TK-1
Emission Unit Description: #1 Solvent Storage Tank
Raw Material/Fuel: Chlorobenzene
Tank Capacity: 75,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this unit at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A record of all materials stored in this shall be maintained. An MSDS shall be kept for all materials stored.
2. The amount of material put through this vessel over the previous month shall be recorded at the end of each month. The total amount of material put through this vessel over the previous twelve months shall also be recorded at the end of each month.
3. An estimate of the amount of VOC's emitted from this vessel over the previous month shall be recorded at the end of each month. The total amount of VOC's emitted from this vessel over the previous twelve month shall also be recorded at the end of each month.

Authority for Requirement: Iowa DNR Construction Permit 99-A-883

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 22
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 9.74
Stack Temperature (^{o}F): 86
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 99-A-883

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 40, 43

Associated Equipment

Associated Emission Unit ID Numbers: EU-8-2836-339, EU-8-2836-337

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)
40	EU-8-2836-339	#2 Solvent Storage Tank	C-9 Solvent	75,000
43	EU-8-2836-337	#3 Solvent Storage Tank	A-200 Solvent	75,000

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

There are no applicable emission limits for these emission units at this time.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 23, 25, 46

Associated Equipment

Associated Emission Unit ID Numbers: EU-10-2014-105, EU-10-2014-207, EU-10TK-5

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)
23	EU-10-2014-105	#1 Emulsifier Tank	Herbicide Additive	15,000
25	EU-10-2014-207	#2 Emulsifier Tank	Herbicide Additive	15,000
46	EU-10TK-5	#3 Emulsifier Tank	Herbicide Additive	15,000

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

There are no applicable emission limits for these emission units at this time.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 259, 247, 257

Associated Equipment

Associated Emission Unit ID Numbers: EU-10TK-23, EU-10TK-22, EU-10-5039-437

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)	Construction Permit
259	EU-10TK-23	#4 Emulsifier Tank	Herbicide Additive	25,000	99-A-894
247	EU-10TK-22	#5 Emulsifier Tank	Herbicide Additive	25,000	99-A-895
257	EU-10-5039-437	#6 Emulsifier Tank	Herbicide Additive	31,000	99-A-888

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission points at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A record of all materials stored in each vessel shall be maintained. An MSDS shall be kept for all materials stored.
2. The amount of material put through each vessel over the previous month shall be recorded at the end of each month. The total amount of material put through each vessel over the previous twelve months shall also be recorded at the end of each month.
3. An estimate of the amount of VOC's emitted from each vessel over the previous month shall be recorded at the end of each month. The total amount of VOC's emitted from each vessel over the previous twelve month shall also be recorded at the end of each month.

Authority for Requirement: Iowa DNR Construction Permits 99-A-894, 99-A-895, 99-A-888

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

EP's 259 and 247
Stack Height (feet): 33
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 2.16
Stack Temperature (^{o}F): 122
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permits 99-A-894 and 99-A-895

EP 257
Stack Height (feet): 43
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 6.4
Stack Temperature (^{o}F): 86
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 99-A-888

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 322, 323

Associated Equipment

Associated Emission Unit ID Numbers: EU-10-0614, EU-10-0617

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)	Construction Permit
322	EU-10-0614	#7 Emulsifier Tank	Herbicide Additive	26,000	97-A-755S1
323	EU-10-0617	#8 Emulsifier Tank	Herbicide Additive	26,000	97-A-756S1

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission points at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Additive cannot exceed 9,344,000 gallons per year in each storage tank.

Authority for Requirement: Iowa DNR Construction Permits 97-A-755S1 and 97-A-756S1

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. Records must be kept of tank throughput over a 12-month period, rolled monthly.

Authority for requirement: Iowa DNR Construction Permits 97-A-755S1 and 97-A-756S1

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

Stack Height (feet): 48
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (acfm): 2.4
Stack Temperature (^{o}F): 122
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for requirement: Iowa DNR Construction Permits 97-A-755S1 and 97-A-756S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 344, 345

Associated Equipment

Associated Emission Unit ID Numbers: EU-10-0753, EU-10-0758

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)	Construction Permit
344	EU-10-0753	#9 Emulsifier Tank	Herbicide Additive	25,000	99-A-511
345	EU-10-0758	#10 Emulsifier Tank	Herbicide Additive	25,000	99-A-512

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: Iowa DNR Construction Permits 99-A-511 and 99-A-512
567 IAC 23.3(2)"d"

(1) If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height (feet): 43
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (acfm): 7.4
Stack Temperature (^{o}F): 122
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permits 99-A-511 and 99-A-512

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 34, 24, 26, 42, 289

Associated Equipment

Associated Emission Unit ID Numbers: EU-10TK-3, EU-10-2014-113, EU-10-2014-210, EU-10TK-26, EU-10-581

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)
34	EU-10TK-3	Herbicide Additive Storage Tank	Herbicide Additive	10,000
24	EU-10-2014-113	#1 Blend Tank	Herbicide Product & Premixes	20,000
26	EU-10-2014-210	#2 Blend Tank	Herbicide Product & Premixes	20,000
42	EU-10TK-26	#3 Blend Tank	Herbicide Product	20,000
289	EU-10-581	#5 Blend Tank	Herbicide Product	20,000

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission points at this time.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 139, 362

Associated Equipment

Associated Emission Unit ID Number: EU-10D-1

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Control Equipment	Raw Material	Tank Capacity (gallons)	Construction Permit
139	EU-10D-1	#4 Blend Tank	NA	Herbicide Product	20,000	01-A-769
362			CE-10CS-1: Carbon Filtration System #1			01-A-770

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission points at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The owner or operator shall not formulate any materials with a maximum true vapor pressure (as defined in 40 CFR 60.111b) equal to or greater than 15.0 kPa in this tank.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner or operator shall maintain records of the maximum true vapor pressure of all materials formulated in this tank.

Authority for Requirement: Iowa DNR Construction Permits 01-A-769 and 01-A-770

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

EP 139
Stack Height (feet): 40
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (acfm): NA – Natural Draft
Stack Temperature (^{o}F): 120
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-769

EP 362
Stack Height (feet): 6
Stack Diameter (inches): 2
Stack Exhaust Flow Rate (acfm): NA – Natural Draft
Stack Temperature (^{o}F): 120
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-770

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 260

Associated Equipment

Associated Emission Unit ID Number: EU-10TK-24

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10TK-24
Emission Unit Description: Small Blend Tank
Raw Material/Fuel: Herbicide Product
Tank Capacity: 2,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 10' 9"
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (scfm): 0.022
Stack Temperature (^{o}F): 140
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 99-A-897

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 258, 248, 249, 250

Associated Equipment

Associated Emission Unit ID Numbers: EU-10-5039-453, EU-10-5039-461, EU-10-5025-466, EU-10-5025-471

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)	Construction Permit
258	EU-10-5039-453	#1 Product Storage Tank	Herbicide Product	34,000	99-A-890
248	EU-10-5039-461	#2 Product Storage Tank	Herbicide Product	34,000	99-A-891
249	EU-10-5025-466	#3 Product Storage Tank	Herbicide Product	34,000	99-A-892
250	EU-10-5025-471	#4 Product Storage Tank	Herbicide Product	34,000	99-A-893

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The total emissions from these emission points shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC's)
Emission Limit(s): 14 ton/yr
Authority for Requirement: Iowa DNR Construction Permits 99-A-890 – 99-A-893

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A record of all materials stored in each vessel shall be maintained. An MSDS shall be kept for all materials stored.
2. The amount of material put through each vessel over the previous month shall be recorded at the end of each month. The total amount of material put through each vessel over the previous twelve months shall also be recorded at the end of each month.
3. An estimate of the amount of VOC's emitted from each vessel over the previous month shall be recorded at the end of each month. The total amount of VOC's emitted from each vessel over the previous twelve month shall also be recorded at the end of each month.

Authority for Requirement: Iowa DNR Construction Permits 99-A-890 – 99-A-893

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

Stack Height (feet): 46
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 16.61
Stack Temperature (^{o}F): 122
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permits 99-A-890 – 99-A-893

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 251

Associated Equipment

Associated Emission Unit ID Number: EU-10-5025-445

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10-5025-445
Emission Unit Description: #5 Product Storage Tank
Raw Material/Fuel: Herbicide Product
Tank Capacity: 31,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A record of all materials stored in each vessel shall be maintained. An MSDS shall be kept for all materials stored.
2. The amount of material put through each vessel over the previous month shall be recorded at the end of each month. The total amount of material put through each vessel over the previous twelve months shall also be recorded at the end of each month.
3. An estimate of the amount of VOC's emitted from each vessel over the previous month shall be recorded at the end of each month. The total amount of VOC's emitted from each vessel over the previous twelve month shall also be recorded at the end of each month.

Authority for Requirement: Iowa DNR Construction Permit 99-A-889

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 43
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 6.4
Stack Temperature (^{o}F): 86
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 99-A-889

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 290

Associated Equipment

Associated Emission Unit ID Number: EU-10-584

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10-584
Emission Unit Description: #6 Product Storage Tank
Raw Material/Fuel: Herbicide Product
Tank Capacity: 65,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 332

Associated Equipment

Associated Emission Unit ID Number: EU-10-662

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10-662
Emission Unit Description: #7 Herbicide Product Tank
Raw Material/Fuel: Herbicide Product
Tank Capacity: 62,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. This tank shall only be used for the storage of Glyphosate products.

Authority for Requirement: Iowa DNR Construction Permit 98-A-551

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. A log of all materials stored in the tank.
2. After the first 12 months of operation, determine the annual throughput for the tank on a rolling 12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 98-A-551

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 62
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 20
Stack Temperature (^{o}F): 104
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 98-A-551

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 333, 334

Associated Equipment

Associated Emission Unit ID Number: EU-10-710, EU-10-711

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)	Construction Permit
333	EU-10-710	#8 Product Storage Tank	Herbicide Product	80,000	98-A-623
334	EU-10-711	#9 Product Storage Tank	Herbicide Product	80,000	98-A-624

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: Iowa DNR Construction Permits 98-A-623 and 98-A-624
567 IAC 23.3(2)"d"

(1) If visible emissions are observed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. Each 80,000 gallon storage vessel is limited to storing materials which have a vapor pressure not exceeding 0.14 psia.

Authority for Requirement: Iowa DNR Construction Permits 98-A-623 and 98-A-624

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. A record of the VOC liquid stored and the maximum vapor pressure of the liquid.

Authority for Requirement: Iowa DNR Construction Permits 98-A-623 and 98-A-624

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

Stack Height (feet): 35
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (acfm): 23
Stack Temperature (^{o}F): 140
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permits 98-A-623 and 98-A-624

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 369

Associated Equipment

Associated Emission Unit ID Number: EU-10-180

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10-180
Emission Unit Description: #10 Product Storage Tank
Raw Material/Fuel: Herbicide Product
Tank Capacity: 45,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. This tank shall only store volatile organic liquids with a maximum true vapor pressure less than 3.5 kPa.
2. This tank shall not be used in any "pesticide active ingredient manufacturing process unit", as defined in 40 CFR 63.1361.

Authority for Requirement: Iowa DNR Construction Permit 02-A-220

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The owner or operator shall keep records showing the maximum true vapor pressure of the materials stored in the vessel.

Authority for Requirement: Iowa DNR Construction Permit 02-A-220

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 54' 4"
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (acfm): NA – Natural Draft
Stack Temperature (^{o}F): 122
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-220

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 202, 137, 172, 173, 144, 145, 207, 208

Associated Equipment

Associated Emission Unit ID Numbers: EU-10-3773-410, EU-10FN-22, EU-10FN-2, EU-10FN-3-1, EU-10FN-3-2, EU-8BL-1, EU-8BL-1, EU-10BL-1, EU-10BL-2

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Rated Capacity
202	EU-10-3773-410	High Speed Jugging	Herbicide Product	2100 gal./hr
137	EU-10FN-22	Spent Product Filter Drying (Jugging)	Herbicide Product	1 drum/day
172	EU-10FN-2	#1 Drum Filling	Herbicide Product	3425 gal./hr
173	EU-10FN-3-1	Spent Product Filter Drying (Drumming)	Herbicide Product	1 drum/day
	EU-10FN-3-2	Product Shuttle Filling	Herbicide Product	2083 gal./hr
144	EU-8BL-1	#1 South Bulk Loading	Glyphosate Product, Acetanilide Product	5000 gal./hr, 4201 gal./hr
145	EU-8BL-2	#2 South Bulk Loading	Herbicide Product	5000 gal./hr
207	EU-10BL-1	Bulk Rail Loading	Glyphosate Product, Acetanilide Product	5000 gal./hr, 2283 gal./hr
208	EU-10BL-2	Bulk Truck Loading	Glyphosate Product, Acetanilide Product, Waste Water	5000 gal./hr, 2283 gal./hr, 40 gal./hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission points at this time.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 329

Associated Equipment

Associated Emission Unit ID Number: EU-10BL-3

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10BL-3
Emission Unit Description: Bulk Truck Loading
Raw Material/Fuel: Herbicide Product/Premix
Rated Capacity: 685 gal./hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. The throughput of this source shall not exceed 6,000,000 gallons of total material per 12-month period.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. Throughput of all materials.
2. Monthly material throughput in gal/month for all materials.
3. During the initial 12 months of operation, cumulative material throughput shall be determined each month of operation.
4. After the initial 12 months of operation, annual material throughput shall be determined on a rolling twelve-month basis each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 98-A-002

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 10
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (acfm): NA
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 98-A-002

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 359

Associated Equipment

Associated Emission Unit ID Number: EU-10-0897

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10-0897
Emission Unit Description: Glyphosate Salt Rail Loading (4 Amine Storage Tanks: 250,000 gallons each)
Raw Material/Fuel: Herbicide Technical
Rated Capacity: 6112 gal./hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. Maintain records of the volatile organic liquid stored, the period of storage, and the maximum vapor pressure of the liquid.

Authority for Requirement: Iowa DNR Construction Permit 01-A-559

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 10
Stack Diameter (inches): 24
Stack Exhaust Flow Rate (scfm): 36.5
Stack Temperature (^{o}F): 122
Vertical[(1)] Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-559
[(1)] Without raincap or with unobstructing rain cap.

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 370

Associated Equipment

Associated Emission Unit ID Number: EU-10BL-4

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10BL-4
Emission Unit Description: Bulk Product Rail Loading
Raw Material/Fuel: Herbicide Product
Rated Capacity: 6667 gal./hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 20
Stack Diameter (inches): 24
Stack Exhaust Flow Rate (acfm): NA – Natural Flow
Stack Temperature (^{o}F): 122
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-221

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 241

Associated Equipment

Associated Emission Unit ID Number: EU-10TK-21

Applicable Requirements

Emission Unit vented through this Emission Point: EU-10TK-21
Emission Unit Description: Wastewater Tank
Raw Material/Fuel: Herbicide Wastewater
Tank Capacity: 20,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 29
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 0.51
Stack Temperature (^{o}F): 86
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 99-A-896

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 27, 28

Associated Equipment

Associated Emission Unit ID Numbers: EU-10FUG-3, EU-10FUG-1

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Rated Capacity
27	EU-10FUG-3	Liquid Formulations Blending (Fugitive Emissions)	Herbicide Products, Solvents, Emulsifiers	NA
28	EU-10FUG-1	Liquid Formulations Packaging (Fugitive Emissions)	Herbicide Products	NA

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission limits at this time.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Flowable Formulations

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
181	EU-14TK-350	Raw Material Storage Tank
182	EU-14TK-33	Raw Material Storage Tank
299	EU-14TK-38	Raw Material Storage Tank
346		
310	EU-14TK-356	PAPI Storage Tank
347	EU-14-464	Isocyanate Storage Tank
361	EU-14-0828	Herbicide Additive Storage Tank
303	EU-14TK-26	Herbicide Additive/Product Storage Tank
311	EU-14TK-300	PAPI Feed Tank
326	EU-14TK-306	Isocyanate Feed Tank
272	EU-14TK-31	Residence Time Tank
301	EU-14TK-31	Residence Time Tank
	EU-14TK-280	Product Surge Tank
187	EU-14TK-101	Product Storage Tank
188	EU-14TK-102	Product Storage Tank
211	EU-14TK-390	Product Storage Tank
212	EU-14TK-391	Product Storage Tank
300	EU-14TK-101	Product Storage Tank
	EU-14TK-102	Product Storage Tank
	EU-14TK-390	Product Storage Tank
	EU-14TK-391	Product Storage Tank
216	EU-14TK-32	Premix Tank
	EU-14TK-36	Formulation Tank
	EU-14TK-751	Formulation Tank
	EU-14-186	East Supersack Unloading
	EU-14-187	West Supersack Unloading
	EU-14-763	North Supersack Unloading
	EU-14RV	Baler & 3 Rotary Valves
339	EU-14TK-13	West Stabilizer Tank
	EU-14TK-21	East Stabilizer Tank
174	EU-14D-1	Flaked Pesticide Handling
186	EU-14BL-1	East Bulk Herbicide Loading
171	EU-14BL-2	West Bulk Herbicide Loading

Flowable Formulations (cont.)

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
363	EU-14BL-3	Bulk Truck Loading/Unloading
368	EU-14-875	Rail Unloading/Product Rail Loading
389	EU-14-0899	Bulk Rail Loading
159	EU-14-FUG-1	Flowables Fugitives

Emission Point ID Number: 181

Associated Equipment

Associated Emission Unit ID Number: EU-14TK-350

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14TK-350
Emission Unit Description: Raw Material Storage Tank
Raw Material/Fuel: Herbicide Technical/Herbicide Premixes
Tank Capacity: 20,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile organic Compounds (VOC's)
Emission Limit(s): 0.42 lb/hr, 1.85 ton/yr
Authority for Requirement: Iowa DNR Construction Permit 96-A-264

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. This tank is limited to chemicals no more volatile than monochlorobenzene (MCB).

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. Keep records on all volatile organic liquids (VOL's) stored in this tank and its maximum true vapor pressure.

Authority for Requirement: Iowa DNR Construction Permit 96-A-264

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 23' 6"
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (acfm): NA
Stack Temperature (^{o}F): 120
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 96-A-264

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 182

Associated Equipment

Associated Emission Unit ID Number: EU-14TK-33

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14TK-33
Emission Unit Description: Raw Material Storage Tank
Raw Material/Fuel: Herbicide Additive
Tank Capacity: 16,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: Iowa DNR Construction Permit 99-A-513
567 IAC 23.3(2)"d"

[(1)] If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 32
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (acfm): 6.7
Stack Temperature (^{o}F): 122
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 99-A-513

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 346, 299

Associated Equipment

Associated Emission Unit ID Number: EU-14TK-38
Emissions Control Equipment ID Number: CE-14CS-3 (associated w/ EP 299 only)
Emissions Control Equipment Description: Carbon Filtration System #3

Applicable Requirements

Emission Unit vented through these Emission Points: EU-14TK-38
Emission Unit Description: Raw Material Storage Tank
Raw Material/Fuel: Herbicide Technical
Tank Capacity: 35,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: Iowa DNR Construction Permit 99-A-514
567 IAC 23.3(2)"d"

[(1)] If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Emission Point Characteristics
Emission Point 346 shall conform to the specifications listed below.

Stack Height (feet): 53
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (acfm): 8.4
Stack Temperature (^{o}F): 122
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 99-A-514

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 310

Associated Equipment

Associated Emission Unit ID Number: EU-14TK-356

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14TK-356
Emission Unit Description: PAPI Storage Tank
Raw Material/Fuel: Polymeric Isocyanate
Tank Capacity: 11,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. A Material Safety Data Sheet (MSDS) for all chemicals stored in the tank.
2. After the first twelve (12) months of operation, determine the annual throughput of material on a rolling 12 month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1263

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 28
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (scfm): 0.2
Stack Temperature (^{o}F): 122
Vertical Discharge Required[(1)]: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 96-A-1263
[(1)] Stack is vertical with a raincap.

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 347

Associated Equipment

Associated Emission Unit ID Number: EU-14-464

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14-464
Emission Unit Description: Isocyanate Storage Tank
Raw Material/Fuel: Isocyanate Blend
Tank Capacity: 12,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: Iowa DNR Construction Permit 99-A-515
567 IAC 23.3(2)"d"

[(1)] If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 28
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (acfm): 0.11
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 99-A-515

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 361

Associated Equipment

Associated Emission Unit ID Number: EU-14-0828

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14-0828
Emission Unit Description: Herbicide Additive Storage Tank
Raw Material/Fuel: Herbicide Additive
Tank Capacity: 31,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. Organic components stored in this tank shall have a maximum vapor pressure of 0.1 psia total.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The owner or operator shall keep records of the total vapor pressure of all organic components stored in this tank.

Authority for Requirement: Iowa DNR Construction Permit 01-A-826

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 35
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (acfm): NA – Natural Draft
Stack Temperature (^{o}F): 85
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-826

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 303

Associated Equipment

Associated Emission Unit ID Number: EU-14TK-26

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14TK-26
Emission Unit Description: Herbicide Additive/Product Storage Tank
Raw Material/Fuel: Herbicide Additive/Herbicide Product
Tank Capacity: 20,000 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 311

Associated Equipment

Associated Emission Unit ID Number: EU-14TK-300

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14TK-300
Emission Unit Description: PAPI Feed Tank
Raw Material/Fuel: Polymeric Isocyanate
Tank Capacity: 400 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. A Material Safety Data Sheet (MSDS) for all chemicals stored in the tank.
2. After the first twelve (12) months of operation, determine the annual throughput of material on a rolling 12 month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1264

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 20
Stack Diameter (inches): 3
Stack Exhaust Flow Rate (scfm): 0.2
Stack Temperature (^{o}F): 122
Vertical Discharge Required[(1)]: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 96-A-1264
[(1)] Stack is vertical with a raincap.

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 326

Associated Equipment

Associated Emission Unit ID Number: EU-14TK-306

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14TK-306
Emission Unit Description: Isocyanate Feed Tank
Raw Material/Fuel: Isocyanate Blend
Tank Capacity: 500 gallons

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. A record of the throughput of this tank shall be recorded at the end of each month. This record should include the throughput of the last month and the total throughput of the previous twelve (12) months.

Authority for Requirement: Iowa DNR Construction Permit 97-A-860

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 40
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (acfm): NA - Displacement
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 97-A-860

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 272

Associated Equipment

Associated Emission Unit ID Number: EU-14TK-31

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14TK-31
Emission Unit Description: Residence Time Tank
Raw Material/Fuel: Herbicide Formulation
Tank Capacity: 1,200 gallons
Iowa DNR Construction Permit: 93-A-138

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 301

Associated Equipment

Associated Emission Unit ID Numbers: EU-14TK-31, EU-14TK-280

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EU	EU Description	Control Equipment	Raw Material	Tank Capacity (gallons)
EU-14TK-31	Residence Time Tank	CE-14CS-6: Carbon Filtration System #6	Herbicide Formulation	1,200
EU-14TK-280	Product Surge Tank		Herbicide Product	1,500

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission point at this time.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 187, 188, 211, 212

Associated Equipment

Associated Emission Unit ID Numbers: EU-14TK-101, EU-14TK-102, EU-14TK-390, EU-14TK-391

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Tank Capacity (gallons)	Construction Permit
187	EU-14TK-101[1]	Product Storage Tank	Herbicide Product	54,000	96-A-267S1
188	EU-14TK-102[1]	Product Storage Tank	Herbicide Product	54,000	96-A-268S1
211	EU-14TK-390[1]	Product Storage Tank	Herbicide Product	20,000	96-A-265S1
212	EU-14TK-391[1]	Product Storage Tank	Herbicide Product	20,000	96-A-266S1

[1] These emission units may be vented through EP 300 during the production of a specific product.

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission points at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. This tank is limited to chemicals no more volatile than monochlorobenzene (MCB).
2. Throughput for these four tanks is limited to 30,000,000 gallons per twelve month rolling period, determined as the total volume of products formulated and stored in this group of tanks.

Authority for Requirement: Iowa DNR Construction Permits 96-A-265S1 – 96-A-268S1

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. Records shall be kept on all volatile organic liquids (VOL's) stored in these tanks and their maximum true vapor pressure.
2. The monthly throughput of these four tanks shall be recorded for each month of operation, determined as the total volume of products formulated and stored in the group of tanks.
3. The twelve month rolling total of the throughput of this group of tanks shall be updated and recorded monthly.

Authority for Requirement: Iowa DNR Construction Permits 96-A-265S1 – 96-A-268S1

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

EP's 211 & 212
Stack Height (feet): 24' 9"
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (acfm): NA – Natural Draft
Stack Temperature (^{o}F): 95
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permits 96-A-265S1 & 96-A-266S1

EP's 187 & 188
Stack Height (feet): 32
Stack Diameter (inches): 3
Stack Exhaust Flow Rate (acfm): NA – Natural Draft
Stack Temperature (^{o}F): 95
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permits 96-A-267S1 & 96-A-268S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 216

Associated Equipment

Associated Emission Unit ID Numbers: EU-14TK-32, EU-14TK-36, EU-14TK-751, EU-14-186, EU-14-187, EU-14-763, EU-14RV

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EU	EU Description	Control Equipment	Raw Material	Rated Capacity
EU-14TK-32[1]	Premix Tank	CE-14D-4: Atrazine Dust Collector	Solid Technical Herbicide, Herbicide Formulations	4,600 gallons (tank capacity)
EU-14TK-36[2]	Formulation Tank		Solid Technical Herbicide, Herbicide Formulations	1,200 gallons (tank capacity)
EU-14TK-751[2]	Formulation Tank		Solid Technical Herbicide, Herbicide Formulations	1,200 gallons (tank capacity)
EU-14-186	East Supersack Unloading		Solid Technical Herbicide	4,000 lb/hr
EU-14-187	West Supersack Unloading		Solid Technical Herbicide	4,000 lb/hr
EU-14-763	North Supersack Unloading		Solid Technical Herbicide	4,000 lb/hr
EU-14RV	Baler & 3 Rotary Valves		Atrazine	0.07 lb/hr (each)

[1] This emission unit may be vented through EP 321 during production of specific products. When this emission point is used, the emissions from this unit are considered to be an "insignificant activity" (as defined in 567 IAC 22.103).

[2] These emission units may be vented through EP 302 during production of products containing clomazone. When this emission point is used, the emissions from these units are considered to be "insignificant activities" (as defined in 567 IAC 22.103).

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %(1)
Authority for Requirement: Iowa DNR Construction Permit 86-A-019S5
567 IAC 23.3(2)"d"

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10
Emission Limit(s): 1.23 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 86-A-019S5

Pollutant: Particulate Matter
Emission Limit(s): 1.23 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 86-A-019S5

Pollutant: Volatile Organic Compounds (VOC's)
Emission Limit(s): 4.38 ton/yr[(3)]
Authority for Requirement: Iowa DNR Construction Permit 86-A-019S5

[(2)] Standard is expressed as the average of 3 runs
[(3)] Standard is a 12-month rolling total

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

1. The owner or operator shall inspect and maintain the control equipment according to manufacturer's recommendations.

Authority for Requirement: Iowa DNR Construction Permit 86-A-019S5

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 86-A-019S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 29
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 11,00
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 86-A-019S5

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing Completed:

Pollutant – PM-10
Stack Test Completed – 3/13/01
Test Method – 40 CFR 51, Appendix M, Method 201A with 202
Result Concentration – 0.000484
Result Emission Rate – 0.04 lb/hr
Authority for Requirement – Iowa DNR Construction Permit 86-A-019S5

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 339

Associated Equipment

Associated Emission Unit ID Numbers: EU-14TK-13, EU-14TK-21

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EU	EU Description	Control Equipment	Raw Material	Tank Capacity
EU-14TK-13	West Stabilizer Tank	CE-14-366: Dust Collector	Solid Herbicide Additive	13 batches/day
EU-14TK-21	East Stabilizer Tank		Solid Herbicide Additive	13 batches/day

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: Iowa DNR Construction Permit 99-A-395
567 IAC 23.3(2)"d"

[(1)] If emissions that exceed the indicator opacity of 25% are observed other than startup, shutdown or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 99-A-395
567 IAC 23.3(2)"a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 55
Stack Diameter (inches): 16
Stack Exhaust Flow Rate (acfm): 3,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 99-A-395

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment:

Baghouse Parameters

Baghouse type: Reverse Jet
Material handled: Solid herbicide formulation additives
Moisture problems possible: No
Material corrosive: No
Operating temperature (°F): Ambient

Monitoring Methods and Corrective Actions

Continuously

The facility will install a broken bag detector as soon as possible after the issuance of this permit. If a broken bag is detected, appropriate measures for remediation will be implemented within eight (8) hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the replacement. Records must be kept and made available for IDNR inspection for a period of five (5) years.

Weekly

The facility will perform the following monitoring and take the following corrective actions as necessary. Monitoring is not required for periods of time greater than one day when the equipment is not operating. The following monitoring methods apply to normal operations and do not apply during periods of process startup or shutdown.

- Record visible emission observation when the process is operating.
- If visible emissions are observed, contact maintenance to conduct troubleshooting.
- If visible emissions continue for more than four (4) hours, shut the process down.
- Once shutdown, restart only after maintenance approval.

Maintain a written record of the observation and any action resulting from the inspection. Records must be kept and made available for IDNR inspection for a period of five (5) years.

Monthly

- Check the cleaning sequence of the baghouse. Sequence inspection will consist of verifying that automated air pulsing is ongoing.
- Check the hopper functions and performance.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannual

- Inspect every 6 months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

Annual

- All bags will be replaced on an annual basis.

A written record of this action will be kept and made available for IDNR inspection for a period of five (5) years.

Record Keeping and Reporting
Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to the manufacturers recommendations.
- An adequate inventory of spare parts will be kept.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 174

Associated Equipment

Associated Emission Unit ID Number: EU-14D-1
Emissions Control Equipment ID Number: CE-14D-1
Emissions Control Equipment Description: Dust Collector

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14D-1
Emission Unit Description: Flaked Pesticide Handling
Raw Material/Fuel: Solid Herbicide
Rated Capacity: 12,000 lb/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 17.8 lb/hr*
Authority for Requirement: Iowa DNR Construction Permit 81-A-076
567 IAC 23.3(2)"a"
* Based on a process weight rate of 18,000 lb/hr.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: 186, 171

Associated Equipment

Associated Emission Unit ID Numbers: EU-14BL-1, EU-14BL-2

Applicable Requirements

EP= Emission point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Rated Capacity	Construction Permit
186	EU-14BL-1	East Bulk Herbicide Loading	Herbicide Product	3417 gal./hr	99-A-898
171	EU-14BL-2	West Bulk Herbicide Loading	Herbicide Product	3417 gal./hr	99-A-899

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from these emission points shall not exceed the levels specified below.

There are no applicable emission limits for these emission points at this time.

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

Stack Height (feet): 12
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 3.1
Stack Temperature (^{o}F): 77
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permits 99-A-898 & 99-A-899

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 363

Associated Equipment

Associated Emission Unit ID Number: EU-14BL-3

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14BL-3
Emission Unit Description: Bulk Truck Loading/Unloading
Raw Material/Fuel: Herbicide Product
Rated Capacity: 5,000 gallons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-902
567 IAC 23.3(2)"d"

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 02-A-902
567 IAC 23.3(2)"a"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 10
Stack Diameter (inches): 24
Stack Exhaust Flow Rate (scfm): 10 (when filling)
Stack Temperature (^{o}F): 113
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-902

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 368

Associated Equipment

Associated Emission Unit ID Number: EU-14-875

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14-875
Emission Unit Description: Rail Unloading/Product Rail Loading
Raw Material/Fuel: Herbicide Product
Rated Capacity: 4167 gal./hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-903
567 IAC 23.3(2)"d"

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 02-A-903
567 IAC 23.3(2)"a"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 20
Stack Diameter (inches): 24
Stack Exhaust Flow Rate (scfm): 7 when filling (displacement)
Stack Temperature (^{o}F): 113
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-903

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 389

Associated Equipment

Associated Emission Unit ID Number: EU-14-0899

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14-0899
Emission Unit Description: Bulk Rail Loading
Raw Material/Fuel: Process Rinsewater, Herbicide Product
Rated Capacity: 114 gal/hr, 3425 gal/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no applicable emission limits for this emission unit.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 20
Stack Diameter (inches): 24
Stack Exhaust Flow Rate (scfm): 7
Stack Temperature (^{o}F): 113
Vertical Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 03-A-312

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 159

Associated Equipment

Associated Emission Unit ID Number: EU-14-FUG-1

Applicable Requirements

Emission Unit vented through this Emission Point: EU-14-FUG-1
Emission Unit Description: Flowable Formulations Fugitive Emissions
Raw Material/Fuel: Solid Herbicide Technical/Herbicide Additives
Rated Capacity: NA

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.
Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period

consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
    a. Form 1.0 "Facility Identification";
    b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
    c. Form 5.0 "Title V annual emissions summary/fee"; and
    d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
    a. Form 1.0 "Facility Identification";
    b. Form 5.0 "Title V annual emissions summary/fee";
    c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges
Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:
1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information
The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties
The owner or operator of any air emission source or control equipment shall:
1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring
1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
    a. The date, place and time of sampling or measurements
    b. The date the analyses were performed.
    c. The company or entity that performed the analyses.
    d. The analytical techniques or methods used.
    e. The results of such analyses; and
    f. The operating conditions as existing at the time of sampling or measurement.
    g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;

b. Compliance test methods specified in 567 Chapter 25; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a. Any monitoring or testing methods provided in these rules; or

b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the

incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The facility at the time was being properly operated;

c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);

c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

d. The changes are not subject to any requirement under Title IV of the Act.
e. The changes comply with all applicable requirements.
f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,
ii. The date on which the change will occur,
iii. Any change in emission as a result of that change,
iv. The pollutants emitted subject to the emissions trade
v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do any of the following:

i. Correct typographical errors
ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
iii. Require more frequent monitoring or reporting by the permittee; or
iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.

iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.

ii. The permittee's suggested draft permit

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing

requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 <u>except</u> 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
    a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
    b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
    c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
    d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
    a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
    b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit; or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability
The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights
The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability
This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer
No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.
Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.
567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2
P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6
1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Planning & Development
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.
Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

V. Appendix A: DNR Air Quality Policy 3-b-08, Opacity Limits

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

POLICY/PROCEDURE STATEMENT

TOPIC: Opacity Limits

Policy Procedure Number: 3-b-08 **Replaces Number: None**

Date: **Effective Date:** November 12, 1998

Preparer: David Phelps **Reviewer:**

Approval: **Bureau Chief: Peter Hamlin** **Date:** 11/12/98

Division Administrator: Allan Stokes **Date:** 11/12/98

Applicable Code of Iowa or Iowa Administrative Code Rule: 23.3(2)d

"No person shall allow, cause or permit the emission of visible air contaminants into the atmosphere from any equipment, internal combustion engine, premise fire, open fire or stack, equal to or in excess of 40 percent opacity or that level specified in a construction permit, except as provided below and in 567-Chapter 24."

REASON OR BACKGROUND

The default opacity limit allowed by regulation is 40%. This limit was established with the original regulations in 1970. It is generally accepted that opacity greater than 40% was evidence of a mass emission standard exceedence. More recently, there have been requests from facilities for limits much lower than that allowed by the regulations, in some cases less than 0.01 gr/scf to which a 40% opacity limit does not correspond. Since opacity is used as an indicator of the particulate emission rate, listing an indicated potential problem opacity that is more in line with the mass emission rate is useful. In order to have the authority to set limits lower than 40%, subrule 23.3(2)d was changed. This change allows the department the ability to set opacity limits at a level that more closely corresponds to what would be observed by the source when operating in compliance with its mass emission rate.

Except in the case where a specific opacity limit is established by rule, it has been the general policy of the Department not to take action on opacity limits directly. Rather, if it is felt that a violation of the mass emission rate exists that is not attributable to some abnormal event, a stack test would be required to verify compliance. However, the Department reserves the right to use the results of formal opacity readings as evidence of an exceedence.

DETAILS

It shall be the policy of the Department to list the default opacity as a permit condition and in addition an indicator opacity may be listed.

For ease of proving continual compliance a source may request a 'no visible emissions' opacity limit which allows proof of compliance without having a certified opacity reading taken. In this case any visible emissions would be an exceedence.

The IDNR permit writer may list an opacity that will be a indicator of possible mass emission rate exceedence. If the permitee wishes, the recommended indicator opacity may be changed by demonstrating compliance with the mass emission rate during a stack test while emitting the new desired indicator opacity. If the tested mass emission rate is less than the permitted emission rate, then the desired indicator opacity may be set at a proportionally higher level than observed during the stack test.

If an opacity measurement, taken in accordance with an approved reference method for opacity, (generally USEPA Method 9 or 22) exceeds the indicator opacity then the facility will promptly investigate the source and make corrections. However, if after corrections are made the opacity continues to exceed the indicator opacity the Department may require additional proof to demonstrate compliance with the mass emissions limits.

Recommended indicator opacities shall be:

Grain Loading gr./scf	Recommended Indicator Opacity
<0.01 gr./scf	non specified in permit *
0.01 to 0.06 gr./scf	10% Opacity
0.061 to 0.08 gr./scf	20% Opacity
0.081 to 0.1 gr./scf	25% Opacity

* A line is added to the permit that states: "If visible emissions are observed other that start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard."

If a source is a batch process the indicator opacity shall be based on the table above, but the opacity averaging period, for comparison to the indicator opacity, shall be the entire batch cycle. For purposes of comparison to the indicator opacity readings shall be taken during the entire cycle and averaged.

Sources are also given the opportunity to set source specific limits to be coordinated with the initial compliance test. These may then be incorporated into the permit.

In all cases an exceedence of the indicator opacity will require the permitee to file an "indicator opacity exceedence report" to the IDNR regional office. The reporting requirements shall be:

Oral report of excess indicator opacity. An incident of excess indicator opacity (other than an incident of excess indicator opacity during a period of startup, shutdown, or cleaning) shall be reported to the appropriate regional office of the department within eight hours of, or at the start of the first working day following the onset of the of the incident. The reporting exemption for an incident of excess indicator opacity during startup and shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in subrule 25.1(6).

An oral report of excess indicator opacity is not required for a source with operational continuous monitoring equipment (as specified in subrule 25.1(1) if the incident of excess indicator opacity continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity.

The oral report may be made in person or by telephone and shall include as a minimum the following:

a) The identity of the equipment or source operation form which the excess indicator opacity originated and the associated stack or emission point.
b) The estimated quantity of the excess indicator opacity.
c) The time and expected duration of the excess indicator opacity.
d) The cause of the excess indicator opacity.
e) The steps being taken to remedy the excess indicator opacity.
f) The steps being taken to limit the excess indicator opacity in the interim period.

Written report of excess indicator opacity. A written report of an incident of excess indicator opacity shall be submitted as a follow-up to all required oral reports to the department within seven (7) days of the onset of the upset condition, and shall include as a minimum the following:

a) The identity of the equipment or source operation point from which the excess emission originate and the associated stack or emission point.
b) The estimated quantity of the excess indicator opacity.
c) The time and duration of the excess indicator opacity.
d) The cause of the excess indicator opacity.
e) The steps that were taken to remedy and to prevent the recurrence of the incident of excess indicator opacity.
f) The steps that were taken to limit the excess indicator opacity.
g) If the owner claims that the excess indicator opacity was due to malfunction, documentation to support this claim.

Exceptions to this policy:

1) In the case where a facility has an opacity limit established in an existing permit, no change will be made to that permit limit unless the permit is being modified for other purposes.
2) If the facility has a continuous opacity monitor, this policy shall not apply.
3) This policy shall not apply to opacity limits established in Prevention of Significant Deterioration (PSD) permits or permits that were established for maintenance plans for nonattainment areas.
4) This policy shall not apply where an opacity limit is established as an indication of hazardous air pollutants.

5) This policy shall not apply where an opacity limit is established by a rule, New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPS), etc.